

that no fees are due in connection with the filing of this paper. Should, however, the Office require any extensions of time or other fees deemed necessary for entry of this paper, please consider this paragraph such a request and authorization for the Assistant Commissioner to withdraw the appropriate fee under 37 C.F.R. §§ 1.16 to 1.21 from Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/2008.002800. Reconsideration of the application in view of the following remarks is respectfully requested.

### REMARKS

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Claims ~~1-47~~ remain pending in the present application. Claims 1-15 and claims 38-47 were withdrawn from consideration by the Examiner in accordance with 37 CFR 1.142(b) as being drawn to a non-elected invention in a previous restriction requirement. Accordingly, claims 16-37 and 48-54 are presented to the Examiner for re-examination in light of the amendments and remarks made herein.

Applicants acknowledge the Examiner's restriction requirement placed on non-elected claims 1-15 and 38-47 being made final. While Applicants do not agree with the restriction requirement set forth by the Examiner, Applicants will prosecute claims 1-15 and claims 38-47 in separate divisional applications.

In the final Office Action, the Examiner indicated that should claims 31-37 be found allowable, claims 48-54 would be objected to under 37 CFR 1.75 as being substantial duplicates thereof. Applicants respectfully disagree with the Examiner's provisional objection to claims 48-54. Applicants respectfully submit that independent claim 48 is broader than independent claim 31 and is certainly not identical nor only slightly different from claim 31 when viewing these claims vis a vis. Applicants submit that it is not proper for the Examiner to object to a

broader version of a claim, and respectfully submit that this provisional objection be withdrawn by the Examiner.

The Examiner rejected claims 16-37 and 48-54 under 35 U.S.C. §102(e) as being anticipated by Janning (U.S. Patent No. 5,982,082). Applicants respectfully traverse this rejection provided by the Examiner.

In the rejection, the Examiner alleges that Janning discloses it is known in the art to produce field emission displays having substrates with an anode formed on a first surface of the glass substrate and a fluorescent material layer that includes phosphor particles applied to the anode surface. The Examiner further alleges that the phosphor particle bound substrate disclosed by Janning is identical to or only slightly different from the phosphor bound particle substrate as defined by claims 16-37 and 48-54 of the present invention. Applicants, however, respectfully traverse this rejection as set forth by the Examiner.

Janning discloses a field emission display device wherein a field emitter cathode matrix is opposed by a phosphor-coated, transparent faceplate that serves as an anode of the field emission display device. Janning further discloses that a barrier layer in the form of a thin film of insulator material (such as a thin silicon nitride layer) is applied directly to the phosphor material to permit the tunneling of electrons but inhibit the flow of ions or scattering of the phosphors within the device when it is activated (note Janning, col. 6, line 60 – col. 7, line 2). Applicants respectfully submit, however, that although Janning may disclose a phosphor-coated, transparent faceplate with a barrier layer formed over the phosphor coating, Janning does not disclose or suggest that this barrier layer is formed by removing a substrate from a binder solution at a predetermined rate as set forth by the independent claims of the present invention.

Janning, on the other hand, discloses that either chemical vapor deposition (CVD) or sputtering techniques are used for the deposition of the silicon nitride barrier layers over the phosphor material (note Janning, col. 12, lines 43-47). Independent claim 16 of the present invention recites “applying phosphor particles to the substrate; submerging the substrate into a binder solution; and removing the substrate from the binder solution at a predetermined rate.” Independent claim 31 of the present invention recites “wherein the phosphor particles are bound to the substrate by submerging the substrate into a binder solution and removing the substrate from the binder solution at a predetermined rate.” Independent claim 48 recites “phosphor particles that are bound to the anode electrode by removing the substrate from a binder solution at a predetermined rate.” Accordingly, because Janning fails to teach or suggest binding phosphor particles to a substrate by removing the substrate from a binder solution at a predetermined rate, Applicants respectfully submit that Janning cannot possibly anticipate independent claims 16, 31, and 48 of the present invention, and all claims dependent thereon, for at least this reason.

Applicants respectfully submit that by removing the phosphor particle bound substrate from the binder solution at a predetermined rate causes the phosphor particles disposed thereon to bind stronger to each other and to the substrate itself. The Applicants disclose on page 8, lines 16-22 of the specification that if the phosphor particles are not properly bound together by the binder material, the phosphor particles will typically shed from the faceplate of the Field Emission Display (FED) device to which the phosphor particles are bound. FED devices tend to be intolerant to phosphor particle shedding because the loose phosphor particles typically affect the operation of the emitters on the base plate upon which the phosphor particles typically fall. Accordingly, because the phosphor particles are bound stronger to each other and to the substrate

as a result of the process of removing the substrate from the binder solution at a predetermined rate, it is respectfully submitted that the phosphor particle bounded substrate of the present invention is distinct from the phosphor-coated faceplate of Janning. Therefore, because the particle bound substrate of the present invention as defined by claims 16, 31, and 48 (and all claims dependent thereon) is a different product from the phosphor-coated faceplate of Janning as a result of the phosphor binding process of the present invention, Applicants respectfully submit that these claims cannot possibly be anticipated by Janning.

In the final Office Action, the Examiner maintains that the phosphor particle bounded substrate of Janning and the present invention are substantially identical. Applicants, however, re-emphasize that applying the phosphor particles to the substrate of the present invention by a materially different process than that of Janning causes the end product of the present invention to be distinct from the end product Janning. As a result of the materially different process by which the phosphor particles are bound to the substrate in accordance with the present invention causes the substrate of the present invention to have its phosphor particles bound differently thereto than the phosphor particles are bound to the substrate of Janning. Applicants further recognize the prior art techniques for binding phosphor particles to the substrate by either chemical vapor deposition (CVD) or sputtering techniques; however, Applicants submit that such techniques cause the bond of the phosphor particles to be weaker, and, thus more prone to particle shedding from the substrate. Accordingly, by using a different process to bond the phosphor particles to the substrate in accordance with the present invention causes the end product to have its phosphor particles bonded differently to the substrate, and, thus forms a different product that is distinct from Janning.

Applicants respectfully submit that the remaining rejections in the present application are improper and should be withdrawn because the cited reference fails to teach or suggest all of the limitations of the claims as discussed in detail above. Accordingly, in view of the amendments and remarks presented herein, a Notice of Allowance is respectfully solicited.

It is believed that no fee is due in connection with filing this paper; however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason, the Assistant Commissioner is authorized to deduct said fees from Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/2008.002800.

The Examiner is invited to contact the undersigned at (713) 934-4058 with any questions, comments or suggestions relating to the referenced patent application.



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PATENT TRADEMARK OFFICE

Respectfully submitted,

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